



ENTERPRISE SYSTEMS ENGINEERING

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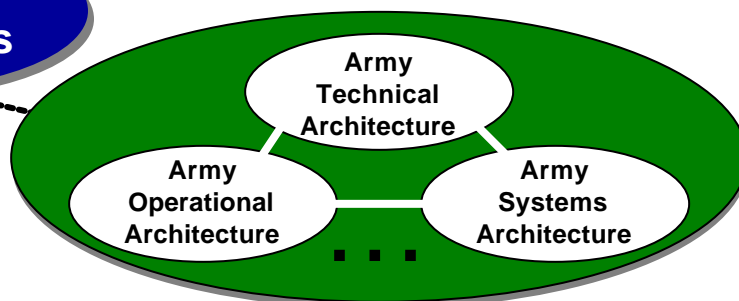
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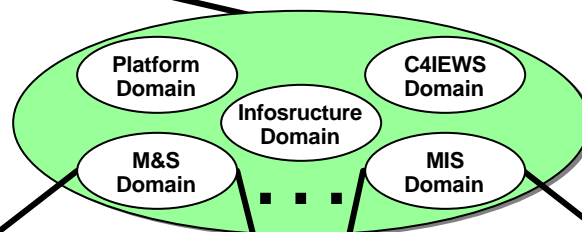


ARMY ENTERPRISE CONTEXT

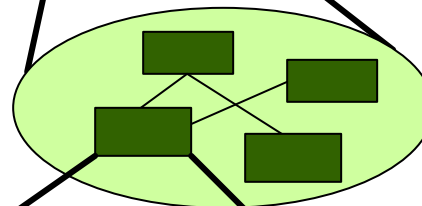
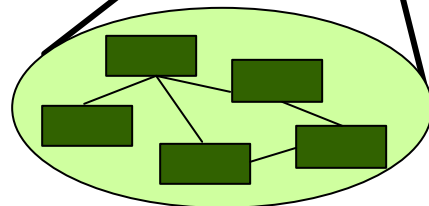
Joint/DoD
Architectures



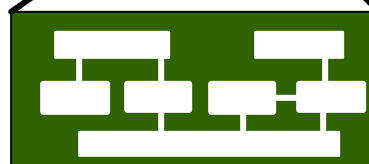
Army Enterprise



Army Domains



*Army Systems of
Systems*



*Individual Army
System & Software*

CECOM Bottom Line: THE WARFIGHTER



TODAY

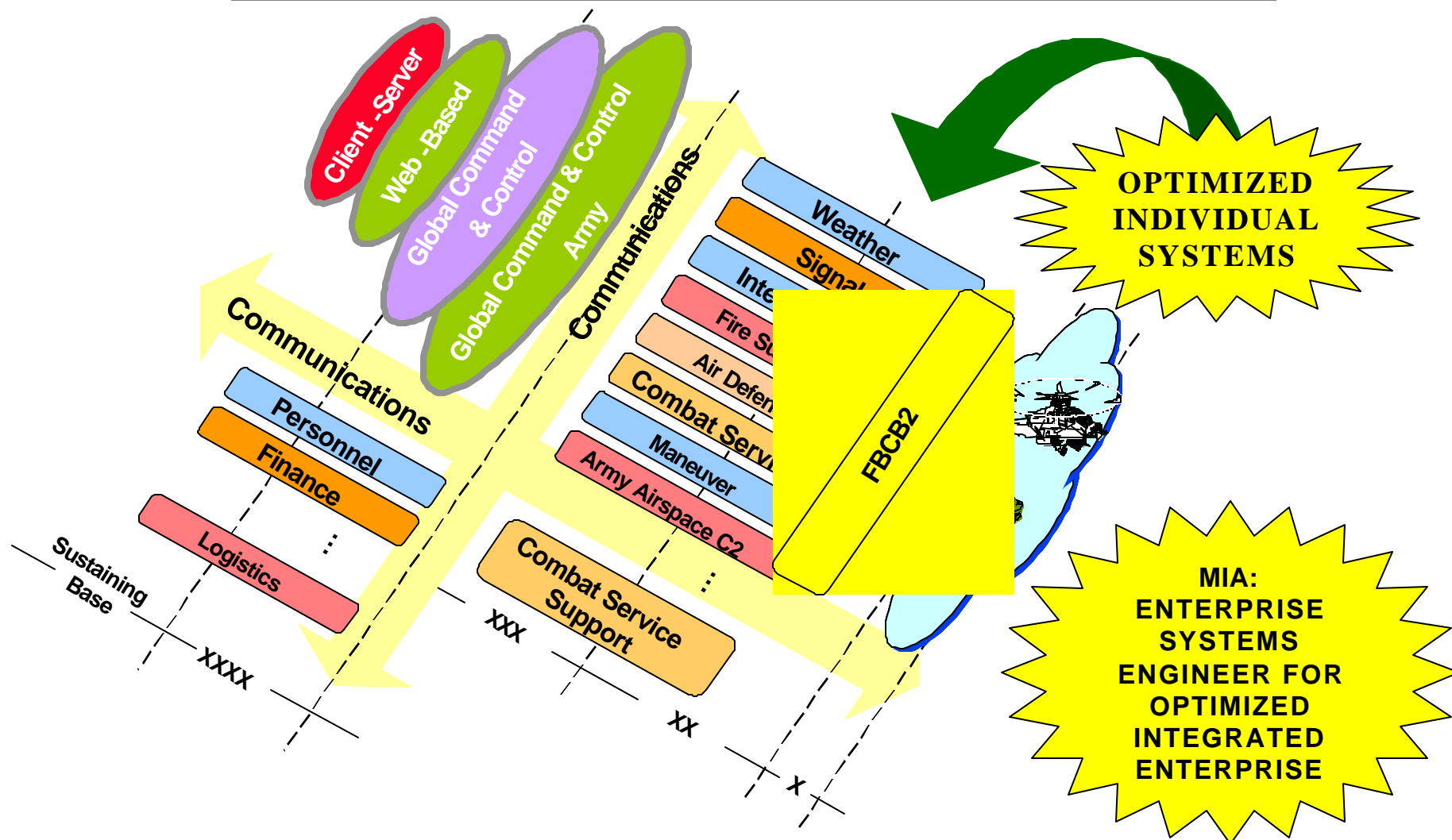
► CHALLENGES:

- ☐ INTEGRATING PLAN (for migration & convergence)
- ☐ UP-FRONT ENGINEERING (for enterprise integration)
- ☐ MIGRATION/TRANSITION OF TECHNOLOGY (optimally)
- ☐ UNIFIED REQUIREMENT
- ☐ FUNDING FOR HORIZONTAL INTEGRATION
- ☐ SYNCHRONIZATION
- ☐ COMPLIANCE (with standards)



ARMY ENTERPRISE SYSTEMS ENGINEERING

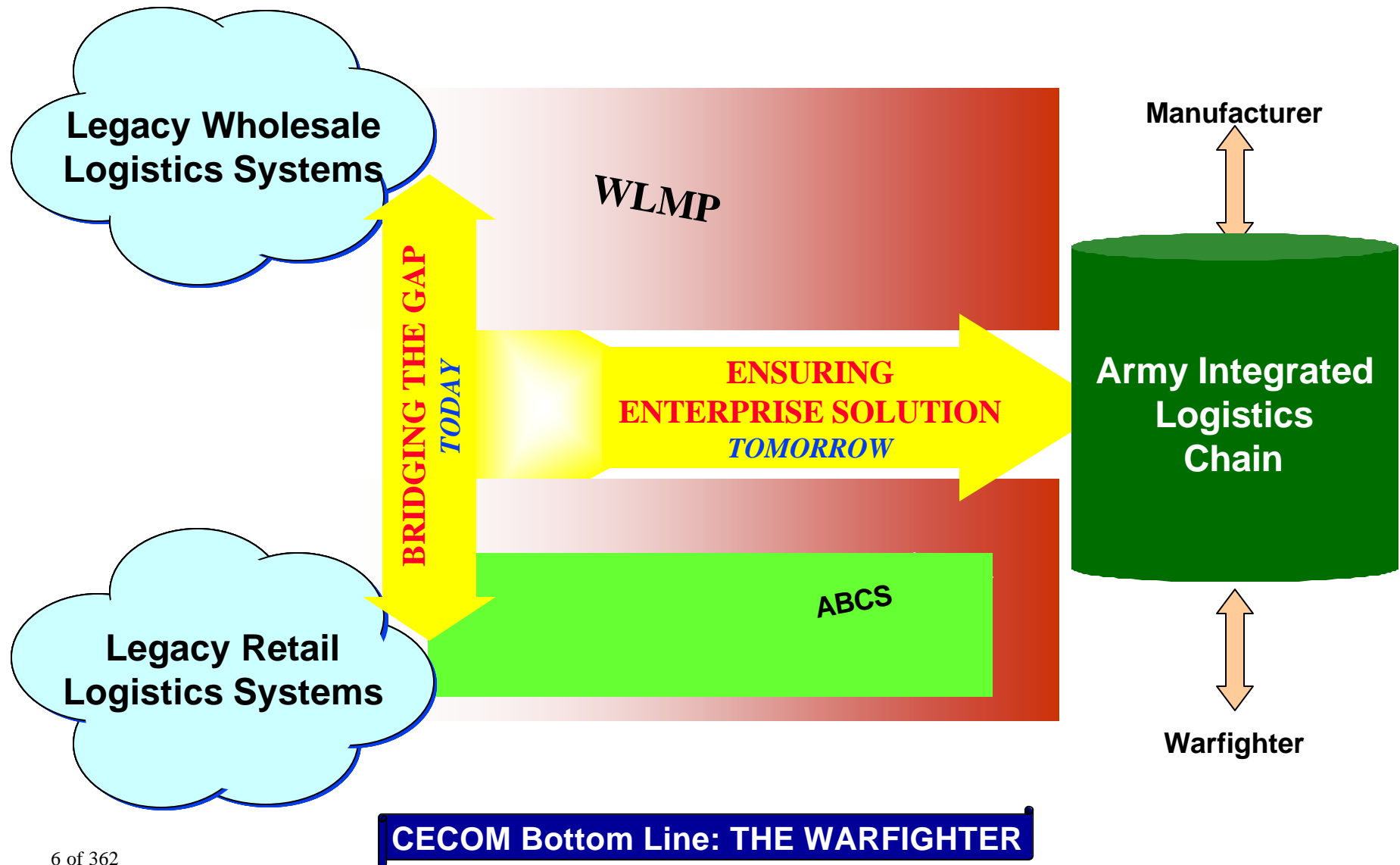
Ensures Integrated Enterprise



CECOM Bottom Line: THE WARFIGHTER



EXAMPLE - LOGISTICS CHALLENGE





EXAMPLE – AKM CHALLENGE

Army's Infostructure

LOGISTICS

FINANCE

INTELLIGENCE & ELECTRONIC WARFARE

...

COMMAND AND CONTROL

Communications

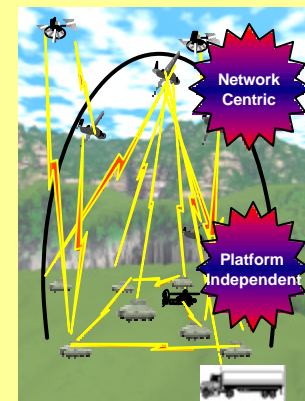
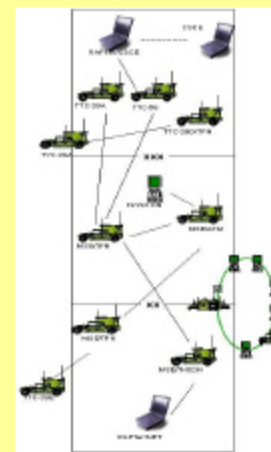
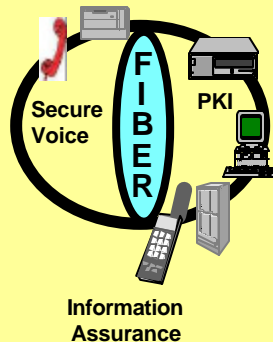
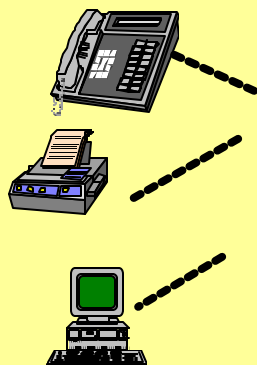
DESK TOP

ON POST

LONG HAUL

THEATER

TACTICAL



ADOPT

ADAPT

DEVELOP

CECOM Bottom Line: THE WARFIGHTER



FUTURE DESIRED STATE

- ▶ **SEAMLESS VERTICAL & HORIZONTAL C4ISR SYSTEMS
INTEGRATION ACROSS THE SPECTRUM OF OPERATIONS TO
MEET THE NEEDS OF THE OBJECTIVE FORCE**

- ☐ **FROM THE BATTLESPACE TO THE SUSTAINING BASE
(Tactical, Strategic, Installation)**
- ☐ **TODAY AND INTO THE FUTURE
(Legacy, Interim, Objective)**
- ☐ **SPANNING FUNCTIONAL DOMAINS
(Fire Support, Intel, Combat Service Support,)**



FUTURE DESIRED STATE

Single System Optimization Interfaced C4ISR

Integrated C4ISR

Communication
Application
Data
Security

*C4ISR
Massed
Effects*



From Battle Space To Sustaining Base

**STOVE
PIPES**

CECOM Bottom Line: THE WARFIGHTER



WHERE WE ARE HEADED

▶ EXPAND ON-GOING ARMY ENTERPRISE SYSTEM ENGINEERING ACTIVITIES

☐ DEVELOP & OVERSEE OVERARCHING ARMY ENTERPRISE SYSTEM ENGINEERING MASTER PLAN

- ARMY-WIDE ENTERPRISE ARCHITECTURE SUPPORT
- RISK MITIGATION THROUGH ARMY-WIDE ENTERPRISE PILOTS
- TECHNOLOGY INSERTION FACILITATION

☐ RESOLVE CROSS-CUTTING TECHNICAL ISSUES, IDENTIFY OPPORTUNITIES, MAKE RECOMMENDATIONS

☐ PROVIDE TECHNICAL CONSULT/EXPERTISE

☐ ASSIST & VALIDATE COMPLIANCE WITH ENTERPRISE SYSTEM ENGINEERING MASTER PLAN



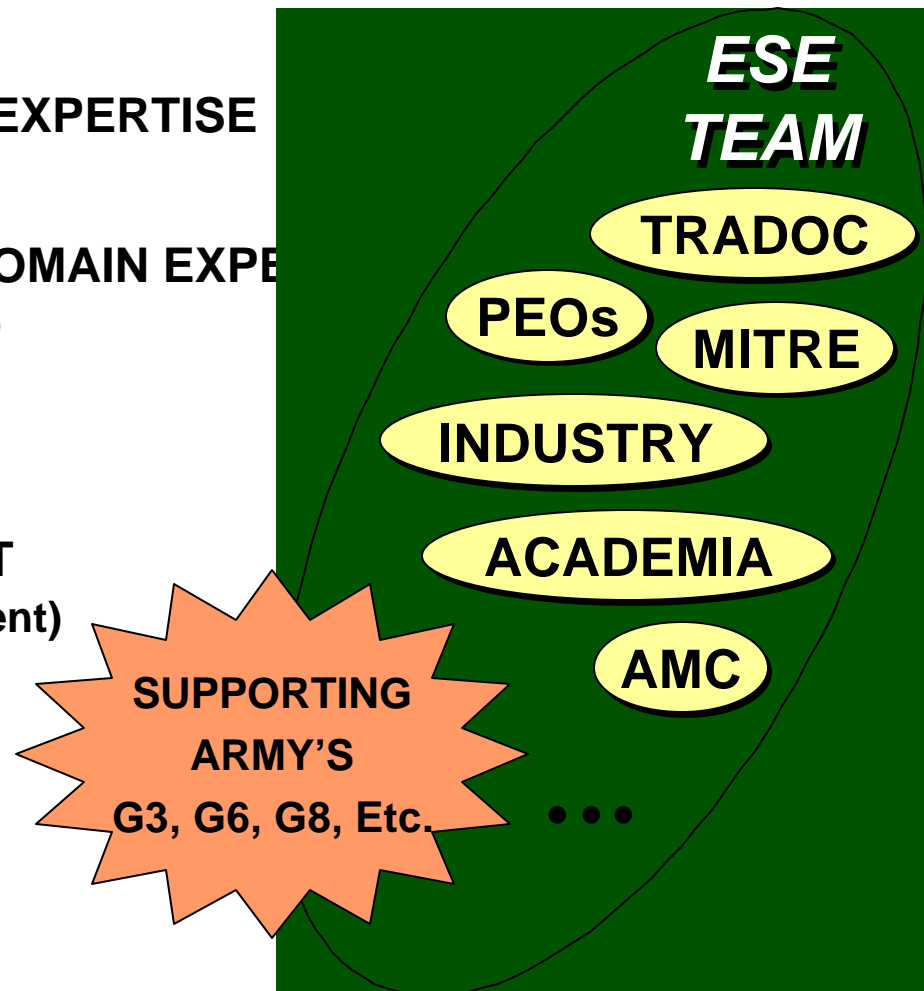
FULLY ENGAGED ACROSS SPECTRA OF ACTIVITIES

.. **SYSTEMS ENGINEERING EXPERTISE**
(ASEO, JTA, Tools, ...)

.. **BROAD RANGE OF C4ISR DOMAIN EXPERTISE**
(C2, Comm, IEW, FS, AV, MIS, ...)

.. **TECHNOLOGY EXPERTISE**

.. **FULL LIFE-CYCLE INVOLVEMENT**
(R&D, Post Development/Deployment)



CECOM Bottom Line: THE WARFIGHTER



WHAT WE ARE DOING

EA (PEO C3T)-TJTN

FCS C4ISR Architecture

Enterprise Applications Architecture

I3MP

Other Individual Efforts

CECOM ESE Team

SEC

LRC

ISEC

RDEC

- Define Enterprise Architecture with plan for migrating from “as is” to objective state
- Synchronize on-going activities to achieve common goal
- Identify shortcomings with current activities and initiate efforts to resolve

INTEGRATED
OBJECTIVE
FORCE

CECOM Bottom Line: THE WARFIGHTER



WHAT ARE WE DOING

- ▶ **Executive Agent (PEO C3T) – Theater Joint Tactical Network**
 - ❑ Ensure Interoperability and synchronization among Service and Agency programs acquiring network components
- ▶ **FCS C4ISR Architecture**
 - ❑ Developed architectural tenets to support Network Centric Warfare
- ▶ **ENTERPRISE APPLICATIONS ARCHITECTURE**
 - ❑ Define framework for developing applications compliant with Enterprise Architecture
- ▶ **Installation Information Infrastructure Modernization Program (I3MP)**
 - ❑ Upgrade the information infrastructure to provide digital connectivity across installations, active support activities and deployed Forces.



HOW INDUSTRY CAN HELP

- **THINK ENTERPRISE SOLUTIONS**
- **PROVIDE FEEDBACK. IT IS CRITICAL.**
- **MORE TO COME**



Questions?



Answers

CECOM Bottom Line: THE WARFIGHTER